



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,747	10/27/2000	Edward W. Jackson	7045.16	6817

7590 06/04/2002

Todd E. Zenger
KIRTON & McCONKIE
60 E. South Temple, Suite 1800
Salt Lake City, UT 84111

EXAMINER

RUDNICK, DOUGLAS W

ART UNIT

PAPER NUMBER

1764

5

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MFC

Office Action Summary	Application No.	Applicant(s)
	09/698,747	JACKSON, EDWARD W.
	Examiner Douglas W Rudnick	Art Unit 1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-6 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Forbush et al. (US 4526771).

With respect to claim 1:

Forbush et al. discloses:

Means for controllably (28) generating sulphur gases (Fig. 1) on-site and on-demand from combustion (16) of elemental sulphur (14).

Means for passively introducing the generated sulphur gases (76) into a pressurized stream of aqueous solution (Col. 6, lines 28-31) to create sulphurous acid.

With respect to claim 2:

Forbush et al. discloses:

Means for generating sulphurous acid (Fig. 1) on-site and on-demand from combustion of elemental sulphur (14).

Means (128, 26) for passively introducing the sulphurous acid into a pressurized line.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forbush et al. in view of Samejima et al. (US 4643808).

With respect to claim 3:

Forbush et al. discloses the invention substantially as claimed. Forbush et al. discloses means for controllably (28) generating sulphurous acid (Fig. 1) on-site and on-demand from combustion of elemental sulphur (14) and the means for introducing sulphurous acid into an aqueous solution (128, 26). However, Forbush et al. is silent to the teaching of the sulphurous acid being capable of dechlorination.

Art Unit: 1764

Samejima et al. teaches the use of sulphurous acid to dechlorinate (Col. 3, lines 47-55) for the purpose of sulphurous acid being a good reducing agent.

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have provided sulphurous acid being used for dechlorination in Forbush et al. in order to have a good reducing agent as taught by Samejima et al.

With respect to claims 4-6:

Forbush et al. discloses the invention substantially as claimed. Forbush discloses controllably (28) generating sulphur gases and sulphurous acid (Fig. 1) on-site and on-demand from combustion of elemental sulphur. Forbush et al. also discloses passively introducing the sulphur gases (76) into a pressurized stream to make sulphurous acid (Col. 6, lines 28-31) and passively introducing the sulphurous acid into a pressurized line (128). However, Forbush et al. is silent to the teaching of the sulphurous acid being capable of dechlorination.

Samejima et al. teaches the use of sulphurous acid to dechlorinate (Col. 3, lines 47-55) for the purpose of sulphurous acid being a good reducing agent.

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have provided sulphurous acid being used for dechlorination in Forbush et al. in order to have a good reducing agent as taught by Samejima et al.

Art Unit: 1764

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas W. Rudnick whose telephone number is 703-305-3141. The examiner can normally be reached on M-F (8:30 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knodle can be reached on 703-308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Douglas W. Rudnick
Art Unit 1764

dwr
May 30, 2002



MARIAN C. KNODE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700